AMENDMENTS TO THE CLAIMS:

Without prejudice, this listing of the claims replaces all prior versions and listings of the claims in the present application:

LISTING OF THE CLAIMS:

1-15. (Canceled).

16. (Currently Amended) A method for establishing one user corresponding to a transceiver, from multiple users of a data network, as a pilot master for emitting a pilot signal to which other users of the data network can synchronize themselves, comprising:

providing at least two of the users as pilot-master-capable; and

checking by at least the pilot-master-capable users, during a checking time interval of random duration individually assigned to them, whether an external pilot signal generated by another user is being transmitted on the data network;

wherein at least one of the pilot-master-capable users, which detects an external pilot signal on the data network during its checking time interval, enters a temporary slave state, [[and]]

wherein one of the pilot-master-capable users, which detects no external pilot signal on the data network during its checking time interval and randomly ends its assigned checking time interval earliest in comparison to the checking time intervals of the other pilot-master-capable users, actually becomes a pilot master and emits the pilot signal after the random duration of its checking time interval has elapsed, and

wherein:

a) the pilot master assigns the pilot mastership to itself only temporarily for a transmission time interval of random duration and it ends the emission of the pilot signal again after expiration of this transmission time interval;

b) the last temporary pilot master, after expiration of the transmission time interval, checks again, during a further checking time interval of random duration

assigned to it, whether a pilot signal generated by another user is being transmitted on the data network;

c) the last temporary pilot master becomes pilot master again and emits the pilot signal if it detects no external check signal on the data network during the

further checking time interval and no other pilot-master-capable user claims the pilot

mastership for itself earlier; and

d) the steps a) through c) are repeated for a predefined number of times X-1.

17. (Canceled).

18. (Currently Amended) The method as recited in Claim [[17]] 16, wherein the step b) is executed only after expiration of a delay time after the end of the step a).

19. (Previously Presented) The method as recited in Claim 18, wherein the last pilot master remains the permanent pilot master and permanently emits the pilot signal after the X-1th repetition.

20. (Previously Presented) The method as recited in Claim 19, wherein the permanently implemented pilot master emits a recognition signal in the form of a ping signal.

21. (Previously Presented) The method as recited in Claim 20, wherein the permanent pilot mastership is only ended by turning off the data network or a reset or malfunction of the permanent pilot master.

22. (Previously Presented) The method as recited in Claim 21, wherein, after permanent implementation of the pilot master and after reception of the ping signal, all other users of the data network enter a temporary slave state and synchronize themselves to the pilot signal emitted by the pilot master.

23. (Canceled).

24. (Currently Amended) The method as recited in Claim [[23]] 16, wherein a user in the temporary slave state checks, during the predefined duration of a checking time interval, whether an external pilot signal is being transmitted on the data network and whether [[the]] a ping signal is being emitted by the permanently implemented pilot master.

25. (Currently Amended) The method as recited in Claim 24, wherein:
        if either [[a]] the ping signal is recognized or the predefined duration of the checking time interval has expired, the user in the temporary slave state changes to a permanent slave state, in which the user communicates to a controller of the data network that it is ready to

3

participate in communication via the data network, and

if possible, the user in the permanent slave state synchronizes itself to the pilot signal emitted by the pilot master.

26. (Previously Presented) The method as recited in Claim 25, wherein:

a user remains in the permanent slave state as long as it detects an external pilot signal in the data network,

as soon as a pilot signal is no longer detected, the user checks again, during a checking time interval having predefined or random duration (S18), whether an external pilot signal is being transmitted,

if an external pilot signal is determined during the checking time interval, the user remains in the permanent slave state; and

if no external pilot signal is determined during the checking time interval, the user changes to the step of checking for the external pilot signal via the initialization state and the standby state after expiration of the duration of the checking time interval, in order to execute the method again from there.

27. (Canceled).

28. (Canceled).

29. (Currently Amended) A data network having multiple users, on which a pilot signal is emitted by a user functioning as the pilot master, so that the other users of the data network may synchronize themselves to this pilot signal, wherein each of the users is pilot-master-capable and is designed to execute, in order to be able to make itself pilot master if necessary, a method for establishing one user corresponding to a transceiver, from multiple users of a data network, as a pilot master for emitting a pilot signal to which other users of the data network can synchronize themselves, comprising:

providing at least two of the users as pilot-master-capable; and

checking by at least the pilot-master-capable users, during a checking time interval of random duration individually assigned to them, whether an external pilot signal generated by another user is being transmitted on the data network;

wherein at least one of the pilot-master-capable users, which detects an external pilot signal on the data network during its checking time interval, enters a temporary slave state,

and

  wherein <u>one of</u> the pilot-master-capable user<u>s</u>, which detects no external pilot signal on the data network during its checking time interval and randomly ends its assigned checking time interval earliest in comparison to the checking time intervals of the other pilot-master-capable users, actually becomes pilot master and emits the pilot signal after the random duration of its checking time interval has elapsed<u>, and</u>

  <u>wherein (i) the pilot master assigns the pilot mastership to itself only temporarily for a transmission time interval of random duration and it ends the emission of the pilot signal again after expiration of this transmission time interval, (ii) the last temporary pilot master, after expiration of the transmission time interval, checks again, during a further checking time interval of random duration assigned to it, whether a pilot signal generated by another user is being transmitted on the data network, and (iii) the last temporary pilot master becomes pilot master again and emits the pilot signal if it detects no external check signal on the data network during the further checking time interval and no other pilot-master-capable user claims the pilot mastership for itself earlier, and wherein (i), (ii) and (iii) are repeated for a predefined number of times X-1.</u>

30. (Previously Presented) The data network as recited in Claim 29, wherein the data network includes power supply lines in a motor vehicle and via which data is also transmitted to produce power line communications.